

From owner-qrp-l@netcom.com Fri Apr 21 18:52:08 1995
Date: Fri, 21 Apr 95 08:32:49 PDT
Message-Id: <9504211532.AA01000@olivea.ATC.Olivetti.Com>
From: fax@sparc4@Olivetti.Com (Marco Fassiotto)
Subject: <didn't bother with a subject>

According to W. Daniel, 9V1ZV:

>
> the versatile PIC 16Cxx type microcontrollers? These things are really super
> versatile, and when purchased in quantities, are in fact very very cheap. Not
> only that, the support circuitry is really simple, and once some one implements
> a smart keyer on it, that is, one that has more than just basic features, it
> can be made so small you really can't believe it. Such a keyer, will have all
> the features of a Curtiss 8044, including control pots for weighting and speed,
> plus the bonus that the weighting can be made continous from negative to
> positive without needing switches. And when some new firmware is developed, we
> can simply re-program the PIC's to get new features etc. I am just wondering
>

I just completed (yesterday night) a keyer like that that will fit into my
IC735 in place of the unit from Icom that costs a fortune. It's
a really basic version, although supporting dot memory on/off and jambic
keying, due to the lack of controls available on the rig but
will soon be expanded with a few memories and such.

It uses an Sgs-Thompson ST62T10 micro controller and will cost about 12\$
provided you have some basic components out from the junkbox (a 78L05 and
a few resistor and caps). The unit draws about 3.0 mA making it ideal for qrp
and portable work (pcb could be made as small as 1.5"x1.5" may be less).

I'm wondering about availability and price of the ST62T10 in the US.

Does anybody know??

72/73, Marco

--

Marco Fassiotto, i1i1y/aa1iu
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From owner-qrp-l@netcom.com Fri Apr 21 13:51:54 1995
From: "Richard Hieber" <SZ0026@daphne.rrze.uni-erlangen.de>
Date: Fri, 21 Apr 1995 16:27:58 MET
Subject: A quick note
Message-Id: <38DB1FE358F@daphne.rrze.uni-erlangen.de>

Hi gang,

due to the nice fact that I have Mosaic on the PC now, I am using an

Windows-Emailer which implies that I am not using my favorite editor today. Short: My excuses if I am messing up.

I want to send a short note *today* in spite of being in a hurry, because I have even less time next week. I'll probably be in Bruxelles on Thursday and from Friday to Sunday I hope to be in Amsterdam to celebrate the Queensday there. If any subscriber to the list wants to meet me, I'll bring my 2m/70cm handy along and will try out the local repeaters.

You've seen the QRP-L Mailing List FAQ that I dropped on the list without forewarning before Easter. I had been tinkering with this for too long, so I wanted to finally get it out and was curious for the reactions. I was relieved to see a few congratulatory notes, the most welcome constructive criticism from LB (W4RNL) that I grew accustomed to (also a note from Daniel) and no flames. No complaints about the size of the file. No bug-reports either though I am sure there are mistakes left since I finished the thing off rather hurriedly.

How often shall I put it on the list? I think once a month is probably enough. Of course it will get updated regularly. Steve Hideg has put a HTMLized version on his Web server. I am sure he has done a fine job but I haven't been able to have a look on it so far with the dismal stateside connectivity that I am suffering from here. Access to SunSITE takes a looong time for me, too.

At the beginning of the Mailing List FAQ I mentioned the other files that will constitute the "QRP-L FAQ suite". My idea to list files that do not exist yet but would be nice to have was probably not very smart. About the "QRP operating guide" I can say that I will probably start to write on it in May and let it develop slowly, posting the interim stages to Usenet (so that I don't need to worry about overloading this list). The "price list" sponsored by K5F0 is probably not ready yet; the "list of rigs with technical details" would come into being very quickly if somebody pasted all these standardized review sheets that the group has seen over the last month into one file. Steve Hideg had the idea to reserve one page per TRX on his Web server, including pictures. I think this would be a very nice thing to have and an excellent resource to point at if somebody asks about the look and features of certain rigs.

The Old Man who posted the components sheets is apparently not loath to have his work put somewhere for general access if I remember my email exchange with him correctly. Each and every one who feels like contributing somehow is welcome. This can be about antennas, portable operation, homebrewing tips (!), newcomer hints, operating tricks and many more facets that I am too stupid to think of, as long as it concentrates

on the relevance for QRP (and not just mainstream ham radio). The people who are maintaining sites, be it Web, Gopher, FTP or whatnot, are always looking for useful additional information to include to make their site more attractive. So share a little bit of the knowledge that you gained while you were having a blast with QRP and let the others know how to join in the fun, too!

One reason to have a QRP-L FAQ File *Suite* (instead of a single FAQ file) is to be able to incorporate additions quickly and effortlessly.

Finally, to compensate for the excess digital stuff above, here is some excess radiation: a QRO QSO. While tuning over the 20m band yesterday I heard a strong signal from a callsign from my area. I called him and it turned out to be a young ham who just had upgraded to a licence with HF privilege. He was using the rig of a clubstation which is only three miles away, with a 5-ele beam at about 30 feet. I was using my Kenwood TS-440 at 100 watts and an endfed wire antenna at about 25 feet with the tuner in the shack. We both produced 'only' a S9 signal (no single dB more ...) at both ends and when the lad on the other end switched off the speech processor, it dropped to S7 to 8.

The lad suspected something to be wrong. I also felt that the signal should have exceeded the S9 mark but could not come up with an explanation why it was 'so low'. There are houses and trees between the two hamshacks which will attenuate the signal. I have had previous contacts to that particular club station on 2m FM and seem to remember that signal levels were substantially higher. Is it just because of the higher gain antennas on 2 meters? What other effects play any role? Am I just being stupid or what?

This has taken longer than I wanted. Surprisingly it's not the typing, it's the thinking that slows me down ;-)

Take care and have a nice weekend!

72 de Richard Hieber, DL8MFQ/AA8CP
sz0026@daphne.rrze.uni-erlangen.de

--

Richard Hieber, DL8MFQ/AA8CP
sz0026@daphne.rrze.uni-erlangen.de

From owner-qrp-l@netcom.com Fri Apr 21 10:55:34 1995
From: "Andrew Comas" <Andrew.Comas@ska.com>
Message-Id: <9504210854.ZM3998@knicks>
Date: Fri, 21 Apr 1995 08:54:01 -0400
Subject: Re: Antenna Analysis

Well I went through the same, trying to decide between the RF-1 and MFJ-259. I

finally decided on the MFJ-259 for the following reasons:

Frequency range.

You get not only HF, but 6 meters and 2 meters.

Frequency counter.

Though I had problems with it when using it to build an ARK-4.

It just wouldn't work on some test points and others it worked just fine.

SWR on Meter instead of Digital Readout -

this makes it easier to 'sweep the band' near your desired frequency so you can tell if you need to lengthen or shorten the antenna (You can also get this from the Resistance meter on it as well).

(I already have an inductance and capacitance meter. Nevertheless the MFJ 259 manual tells you how to build a test circuit for these.)

Over all I've been happy with it, and it's the second most used test tool in my house (the DVMM is the most, but then again the DVMM has the inductance, capacitance, logic probe, and 20Mhz frequency counter (only to 2 significant digits so not as accurate as the MFJ's) built in.

Let us know what you decide and why. I always find people's decision making process interesting, it helps clarify mine.

73s de Andrew AA2UG

From owner-qrp-l@netcom.com Fri Apr 21 12:27:08 1995

From: JEVERHART@cayman.VF.MMC.COM

Date: Fri, 21 Apr 1995 10:08:02 -0400 (EDT)

Message-Id: <950421100802.2384a19f@carib.vf.mmc.com>

Subject: RE: Antenna Analysis

Mike,

You asked for advice in choosing a suitable antenna analyzer. I have experience with several of them, so here goes.

If you are trying to adjust an antenna it is often useful to have an idea of the antenna impedance as well as the SWR. The only units you mentioned that do this are the MFJ259 and the Autek RF-1.

In addition, particularly for outside use it is convenient to have a small portable unit. (Having used old GR bridges and the newer HP Impedance Analyzers at remote sites like Iowa cornfields and Washington state mountain peaks I can attest to the latter!) The RF-1 wins hands down in that respect.

Another unit that may be considered is one by AEA (I forget the model number). It automatically displays a plot of SWR vs frequency. However it is significantly more expensive than either the MFJ or Auttek units and I believe it does not have an impedance display.

The MFJ units have analog displays for SWR (and the 259 has resistance). Some prefer analog displays for ease of peaking or nulling. I prefer the precision and repeatability of a digital display.

The MFJ 249 and 259 have the added advantage that they have external jacks for their frequency counters, making them usable as test equipment beyond antenna use. A recent article in QRP Quarterly showed how to use them to measure and set the offset in homebrew transceivers.

On the other hand, the RF-1 has the ability to measure and display components such as inductors and capacitors and display their values. This makes it potentially useful as a ham lab bench instrument. The RF-1 manual has plenty of info on these additional uses.

I have used both the MFJ249 and the RF-1. In fact I taught an antenna course to engineers and technicians where we used the 249 in a lab. When it came time to buy one for my own use, I bought the RF-1. And I have not regretted it in the least.

Good luck and let us know what you get and your success in using it!

72/73,

Joe E. N2CX

From owner-qrp-l@netcom.com Fri Apr 21 14:24:17 1995

From: N5EM@aol.com

Date: Fri, 21 Apr 1995 10:44:51 -0400

Message-Id: <950421104445_91062339@aol.com>

Subject: Re: Antenna Analysis

Mike and the gang,

I decided to get the MFJ without the freq. counter and bought a Startek counter separately. The built-in counter only went up to 2 meters and I wanted a better counter. I ended up spending a bit more for both boxes, but now have the best of both worlds. The combination of SWR analyzer and portable counter is a bit bulkier and cumbersome, especially for outdoor work (and LEDs are harder to read outside), but it works real well and lets me count stuff at 70cm and 23 cm as well.

I have not gotten rid of my Palomar Engineers RF Noise Bridge, however. I

still occassionally want to know more than the SWR and for that, the Palomar shines.

73

Ed, N5EM

n5em@aol.com

From owner-qrp-l@netcom.com Fri Apr 21 18:28:42 1995
Date: Fri, 21 Apr 95 12:42:23 CDT
From: gcouger@agen.okstate.edu (Gordon Couger)
Message-Id: <9504211742.AA06580@jsun.agen.okstate.edu>
Subject: Re: Antenna Analysis

I have a mfj 259 and Booton RX250A. I have allso had Palmor noise bridges. The MFJ is the poorest performanc of the bunch but the hansiest to use. It's the one I pick up first.

I traded the noise bridge but I'll pick up another. The Booton is of course very much the best. but over kill for most antena projects.

Gordon

From owner-qrp-l@netcom.com Fri Apr 21 16:42:18 1995
Date: Fri, 21 Apr 1995 17:26:51 GMT
From: Goran Hosinsky <goran@royac.iac.es>
Message-Id: <9504211726.AA04085@royac4.royac.iac.es>
Subject: RE Antenna Analysis RF-1

Hello Mike,

NOTE: the RF-1 ONLY READS THE MAGNITUDE OF Z
It is not possible to use it as a noise bridge or R+jX meter
getting both R and X.

I just got my RF-1 and got rather disappointed when I found that the C and L scales does not not read the X-value part of the impedance.

Apart from that it is a lovely little gadget with which you can do many things more than measuring the resonance frequency of the antenna. You can get Zo and line loss for coax and balanced lines. You can adjust 1/4 l and 1/2 l lines, you can use it as a L and C meter, you can use it to tune your ATU and a lot more (all this from the instructions)

I believe it would be fairly simple to make an adaptor with a coil - variable capacitor series combination making it possible to resolve the $\pm jX$ too, but I do not know what type of errors one would get. Perhaps someone on this net has experience from that?

In all, I find it a useful and price worth instrument.

73 Goran EA8YU

From owner-qrp-l@netcom.com Fri Apr 21 19:56:21 1995
Date: Fri, 21 Apr 1995 07:05:31 -0700
Message-Id: <199504211405.HAA08272@ix2.ix.netcom.com>
From: jeffa@ix.netcom.com (Jeff Anderson)
Subject: Re: DigiVFO as Square Wave

Kent,

You've given me food for thought...

As Duncan points out, if a diode-ring balanced mixer essentially "squares-up" the local oscillator signal, then does this mean that an NCO, no matter what its DAC resolution, should NOT be used as the LO feeding it (or similarly, that an NCO should not be used with any saturating or "chopping" type mixer)? It seems to me that if the NCO is squared-up, no matter what the DACs bit resolution, there will be obvious jitter to the square-wave edge as the NCO phase accumulation bumps or holds the higher-order bits feeding the DAC.

To help myself try to understand the problem, I've created a simple example. Let's use a 4 bit value: the MSB represents the "squared-up" DAC signal, and the 3 LSBs are the phase accumulation (not seen by the outside world). Let the phase accumulation increment be 0111 (this represents an output frequency just less than 1/2 of our "clock" frequency).

Count	Count	Sq._Wave Output
0	0111	0
1	1110	1
2	0101	0
3	1100	1
4	0011	0
5	1010	1
6	0001	0
7	1000	1
8	1111	1 <--- Edge Jitter Here
9	0110	0

I guess one could call this edge jitter "phase noise", although it isn't random, but occurs at regular, repeating intervals. (some have said that NCOs don't have phase noise - are they incorrect, or am I missing something here?)

How are NCOs typically used in systems? Do they ever feed mixers directly, and what kind of mixers are these?

Thanks for any info you can give.

73,

Jeff, WA6AHL

From owner-qrp-1@netcom.com Fri Apr 21 23:46:16 1995
Date: Fri, 21 Apr 1995 16:58:26 -0600 (MDT)
From: <torell@icarus.sicom.com>
Subject: Re: DigiVFO as Square Wave
Message-Id: <Pine.3.05.9504211625.A21146-c1000000@icarus>

Jeff,

You have a good simulation to see what we call phase truncation in the accumulator. This indeed generates a discrete spur offset from the desired signal at the 'overflow' rate of the unseen bits. Therefore, the bigger the phase accumulator, the better. The spur amplitude is a function of how many bits go into the phase to amplitude rom function; 10 bits of phase roughly give phase dither equivalent to -60 dBc spurs. These are the fast, close in spurs (fast in that they tune rapidly as you tune the nco). The other spurious are amplitude spurs, which are always harmonics of the fundamental; however, since this is a sampled system, they multiply fold around the nco clock source frequency. I used one synthesizer that cleverly balanced these sources; the clock was fast enough (about 8 times the desired) that an 8 bit dac provided the equivalent of 10 bit performance after the spurs had folded back to the region of interest. They used a 10 bit phase accumulator.

A straight 1 bit output should show phase spurs of around -10 dBc (big fudge factor here!), so you definitely don't want that approach.

We build some all digital systems that use the numerical output of the nco to digitally tune the signal around; lots of bits, tho, and the silicon is pretty expensive! Very predictable, though, and you will be seeing expensive

base stations (pagers, cell phones, ect) going to digital in the near future. It may be expensive, but it is very well controlled and manufacturable.

Probably the best reference for this is in a couple of papers authored by Samueli and Nicholas; 1987 41st Annual Frequency Control Symposium, "An analysis of the Output Spectrum of Direct Digital Frequency Synthesizers in the Presence of Phase-Accumulator Truncation", p. 495-502, and again in 1988 at the 42 conf, "The Optimization of Direct Digital Frequency Synthesizer Performance in the Presence of Finite Word Length Effects", pp. 357-363. The seed for these papers was Henry Nicholas' Masters thesis, for an MSEE at UCLA; "The Determination of the Output Spectrum ... ect." in 1985. If you stop by the UCLA library, you can look at it; they are bound. In general, anything associated with Samueli is worth looking at in the digital receiver world....

OBQRP

Almost had my first qrp cw contact with my homebrew modified 40-40; a friend a few blocks away had his OHR rig set up, so we tried over noon. I was booming in, but I couldn't hear him, except right at the noise floor. We suspect his tx output, since we could hear the same stations. Had to make contact with a (qrp level) 2 meter HT :(. Someday !!!!

Kent Torell KJ7EY torell@sicom.com

From owner-qrp-l@netcom.com Fri Apr 21 23:27:40 1995
From: PDouglas12@aol.com
Date: Fri, 21 Apr 1995 21:28:32 -0400
Message-Id: <950421212723_91748377@aol.com>
Subject: Final Badge List

OK, they're all done. Here's the list of QRP-L ers who will be at Dayton. If you want a copy of the list, save this one to your printer. I am not carrying a ream of copies with all the other stuff I am bringing! It is now officially too late. The badges are printed, and for technical reasons (cdrom drive is acting up) I do not expect to be able do any more printing. There are 97 by final count. Mathews and Jones, don't panic, you're the last, so you went to the bottom. Pick them up at the G-QRP booth or after hours in the hospitality suite. See you all there, God willing and the river don't rise. Preston WJ2V

ANTHONY LUSCRE KA8NRC
BILL KELSEY N8ET
BILLY DAVIES N3GBZ

BOB FINCH N6CXB
BOB GOBRICK V01DRB/WA6ERB
BOB MARLAN KA6NOC/8
BOB NYGREN WA3YON
BOB STAFFORD N9USD
BOB WELCH W8MCJ
BOB WHITE W03B
BRUCE FLORIP AA7AR/6
BRUCE LIFTER AD4TG
BRUCE MUSCOLINO W6TOY/3
BUCK SWITZER N8CQA
BYRON JOHNSON WA8LCZ
CHUCK ADAMS K5FO
CLARK FISHMAN WA2UNN
DAN PUCKET WD8AAU
DAVID ADAMS N9UXU
DAVID FELDMAN WB0GAZ
DAVID GAUDING NF0R
DAVID MEACHAM W6EMD
DAVID SCOTT N8XYF
DEE ANN RAY N9XLV
DENNIS BLANCHARD K1YPP
DICK PASCOE G0BPS
DICK SZAKONYI KA3ZOW
DOUG HENDRICKS KI6DS
DUFFY BEISCHEL WB8NUT
ED LIESER KB8TMY
EMIL SWITZER W1GGM/4
ERIC SWARTZ WA6HHQ
F. "MITCH" MITCHELL WA4OSR
FRANK FORSYTH N8XT0
GARY DIANA N2JGU
GEORGE SILVER N9SXB
GREG HEMMING VE4GH
HANK KOHL K8DD
HOWIE CAHN WB2CPU
HUGH MATHESON K6QD
JANE BLANCHARD KA1FUN
JASON PENN N9RPT
JERRY SY AA3KN
JIM CATES WA6GER
JIM DAVEY WA8NLC
JIM FITTON W1FMR
JIM HINCHLEY VA3EA
JIM JOHNS KA0IQT
JIM KORTGE NU8N
JIM STAFFORD W4QO
JIM STEVENS KK7C

JIM STEVENS KK7C
JOE EVERHART N2CX
JOHN LIEBENROOD K7RO
JOHN ROUSE KA3DBN
KATHY SZAKONYI N3SAD
KEITH HAMILTON N08Z
KEN EVANS KJ4XR
KIRK STAATS AA4YZ
LARRY JONES N50SG
LARRY MAKOSKI N2ELW
LINDA LUSCRE KA80DP
LOWELL CORBIN KD8FR
MARTY RAY NN9H
MICHAEL MARMOR AA2UJ
MICHAEL RIOUX NW1J
MIKE CZUHAJEWSKI WA8MCQ
MIKE FLANAGAN KB8NKX
MONTE "RON" STARK KU7Y
NILS YOUNG WB8IJN
PAUL VALKO WB8ZJL
PAULETTE QUICK N90UH
PETE MEIER WK8S
PETER BEEDLOW NN9K
PHIL SALAS AD5X
PRESTON DOUGLAS WJ2V
PRESTON DOUGLAS WJ2V
RANDY PHELPS KD8JN
REV. GEORGE DOBBS G3RJV
RICH ARLAND K7YHA
RICH KELLNER W5RXP
RICH RICHMOND N4AFX
RICK TAVAN N6XI
ROBIN CORBIN NI9R
RON DOYLE N8VAR
RON MAJEWSKI WB8RUQ
RUSS JOHNSON N9RJ
STEVE COHEN N30IE
STEVE HIDEG N8HSC
TED ALBERT KF8EE
TIM COOK NZ8J
TIM SMITH N1BTQ
TOM FRISZ N9DD
TOM LIFLAND W2RFU
TOM STAFFORD N9YBC
VINCE PASSIONE WA2ECP
WAYNE BURDICK N6KR
SCOTT MATHEWS N8JSK
ALLEN JONES K9DZE

From owner-qrp-1@netcom.com Fri Apr 21 09:39:34 1995
Date: Fri, 21 Apr 95 7:43:27 EDT
Message-Id: <heH8+4ltZjb@PAMDT.ANG.AF.MIL>
From: <CBAILEY@PAMDT.ANG.AF.MIL> (MSgt Cameron C.R. Bailey)
Subject: re: Ham Stick Antennas

Hello,

I am now in the process of installing Hamsticks for 20 and 40 meters on the trunk lid of my mid-sized sedan. I have not configured the HF rig and cables yet.

I did some tests with the Autek RF-1. I found I was able to resonant the antennas close to where the spec sheets show them to be set at. This is referenced to the length of the whip section.

The one thing I'm finding is that the impedance is rather low at resonance. 30 ohms in one case. I don't remember which band that was. For 20 meters the SWR was 1.7 to 1. On 40 meters, the SWR was 2.5 to 1. Resonance was tuned for recognized QRP CW frequencies.

Stay tuned.....(no pun intended).

72 de cameron, kt3a

Cam Bailey
SOGNET LAN Administrator (Banyan)
211 Engineering Installation Squadron
Fort Indiantown Gap (Annville) PA
DSN: 491-8737 Comm: 717-861-8737 FAX: 8268

From owner-qrp-1@netcom.com Fri Apr 21 19:08:58 1995
Subject: Re: Ham Stick Antennas
Date: Fri, 21 Apr 1995 11:38:06 -0700
Message-Id: <24711.798489486@safety.ics.uci.edu>
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

I have used a 40 meter Ham Stick for some time now, mostly with the Argonaut 509 mobile SSB. On the Century Club and HHH nets in the evenings, I could often cover the continent. For normal times, I could usually have a decent QSO as long as the guy on the other end was willing to wade through some QSB with me.

Can't compare it with other antennas, but it seemed to work fine. I have used the Hustler, and the old venerable Webster Bandspanner

and they work OK too. There was a recent comparison of field strength with mobile antennas that showed the Hamstick to do pretty well, better than the Hustler and that expensive Outbacker contraption. I believe the bugcatcher did the best.

Good luck.

Clark
WA3JPG

From owner-qrp-l@netcom.com Fri Apr 21 16:50:17 1995
Date: Fri, 21 Apr 1995 07:27:57 -0500 (EST)
From: cebik@utkvx.utk.edu
Subject: Hustler G-10
Message-Id: <Pine.3.89.9504210704.A560016530-01000000@utkvx.utk.edu>

A friend received one of these antennas with no instructions. Wonder if there is a spec sheet or instruction page, along with any information on its basic principles (friend has been told a. it is a regular vertical and also b. it is a center fed half wave). Apparently the antenna was designed for both ham 10 meter and CB 11 meter use. Any info will be appreciated. Is a photocopy of the paperwork on the antenna available anywhere? Friend's call to Hustler got him the reply that they "have no files on discontinued products." Apparently CBers called the antenna the "big stick," about 18' long in 3 sections.

Any assistance appreciated.

-73-
LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off) (615) 974-7215
1434 High Mesa Drive	/	\	\	----	/	---	(Hm) (615) 938-6335
Knoxville, Tennessee	/\	\	\	/	/		(FAX) (615) 974-3509
37938-4443 USA	/	\	\	\			cebik@utkvx.utk.edu

From owner-qrp-l@netcom.com Fri Apr 21 16:17:45 1995
Message-Id: <m0s2M33-00004WC@juts.ccc.amdahl.com>
Date: Friday, 21 April 1995 09:53 PT
From: bruce.florip@amail.amdahl.com
Subject: HW-9 IF filter

HW-9 IF Filter Parts Acquisition

CALL		Inet Addr		Name

AA7AR/6 | baf00@amail.amdahl.com | Bruce Florip
| |
| |
| |

Now just see if you agree? :) It sounds like Stan has volunteered if there are enough of us interested! Bruce

Stan's letter:

Greetings,

I was looking for a mod to improve the IF filtering on my HW-9 and found an article that Paul, kb1mj was selling parts kits to tighten up the filter and improve the matching and gain . Paul was selling the parts for \$28.

This mod was based on Cams', n6ga article in an old qrp quarterly issue. Unfortunately, There are no parts kits left.

At this time, I would like to know how many people would be interested in going in on a group purchase of the necessary parts or at least the 8.8307 crystals, provided we can find a reasonable source ?

This would replace the if filter in the hw-9 that has a -6db bandwidth in excess of 2 khz wide.

72.25 (I still use high power when I need it)

Stan Goldstein , N6ULU

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From owner-qrp-1@netcom.com Fri Apr 21 21:28:05 1995
Message-Id: <199504212105.0AA17088@netcom6.netcom.com>
Date: Fri, Apr 21, 1995 16:05
From: "Ted Kell" <kell@mpac.jsc.nasa.gov>
Subject: Looking for a FET

I have been looking at the "California Board" SSB rig in the latest issue of QRPp and have run into a slight problem. I cannot find any reference to the FET labeled as Q! on the main board. It is listed as a VN10KM. Can anyone help me in finding a source, or perhaps a replacement for this device? I have seen a VN101P in the latest Digi-Key catalog and talked to the manufacturer. They tell me that it is a european device, so perhaps the VN10KM is also. So if anyone has info on this, I would appreciate hearing from you.

73

KC5CUW

Ted Kell (kell@mpac.jsc.nasa.gov)

From owner-qrp-1@netcom.com Fri Apr 21 14:04:40 1995

Date: Fri, 21 Apr 1995 09:40:38 -0500 (CDT)
From: "Mitch, WA4OSR" <fmitch@maf.mobile.al.us>
Subject: Re: Marconi on TV
Message-Id: <Pine.SOL.3.91.950421093905.20221A-100000@ns1>

> Marconi program on TV
>
> On Wednesday, April 19, the Arts and Entertainment television
> network will air a program about Guglielmo Marconi, as part of its
> ''Biography'' series.
>

hi... mitch wa4osr here at vibroplex...

i counted 2 vibroplex bugs in the program... anyone spot any others???

* * * The *FIRST HAM OWNER* of The Vibroplex Co., Inc. * * *

Email: fmitch@maf.mobile.al.us or, second choice, fmitch@rd.qms.com
Felton "Mitch" Mitchell, WA4OSR
The Vibroplex Co., Inc.
11 Midtown Park, E.
Mobile, AL 36606-4141 USA
334-478-8873 Vibroplex, 334-342-7259 home, 334-476-0465 FAX

From owner-qrp-1@netcom.com Fri Apr 21 20:11:37 1995
Message-Id: <3007577952.0.p01599@psilink.com>
Date: Fri, 21 Apr 95 15:23:26 -0500
From: "OPS Jim KC1FB" <p01599@psilink.com>
Subject: My WM-1 Arrives

I have received my OHR WM-1 Kit with a note that they are getting out
of the parts business.....probably missed someone else telling me that,
but it's not good news for us 'brewers.

Now to find all the "mod" notes from the last few months.....gotta use
some of them...or it won't be "mine".

Jim

From owner-qrp-1@netcom.com Fri Apr 21 20:09:11 1995
Date: Fri, 21 Apr 95 09:22:49 MDT

From: miker@cc.com (Mike Robinson)
Message-Id: <9504211522.AA21420@cc.com >
Subject: Norcal40

Is there a source for the NorCal40 (not the 40a) schematic?

```
=====
7.3 de Michael aa0ub          | QRP:
miker@cc.com      Norcal #857  | "This thing's a radio?"
=====
```

From owner-qrp-1@netcom.com Fri Apr 21 18:33:07 1995
Message-Id: <199504211626.MAA01074@jfwhome.funhouse.com>
Subject: Re: Ocean State Electronics
Date: Fri, 21 Apr 1995 12:26:32 -0400
From: "John F. Woods" <jfw@jfwhome.funhouse.com>

Steve Slavsky wrote:

> I called Ocean State today and they will only send a catalog with an order
> or for \$2.00, cash or check. They do not want an SASE, they want to sell
> you a catalog. I know its not a lot of money, but there are a lot of
> vendors out there.

Uh, not if you keep that up.

Well, I went into a big long rant about the dwindling ranks of parts suppliers and the fact that thick printed catalogs cost real money, but I assume everyone actually knows this, so I thought instead of ranting I'd just take the opportunity to remind everyone that low-margin operations run by individuals (like KA7QJY), or small handsfull of people (like Ocean State) are really helped out by small contributions for the catalogs, so if you like being able to order air-variable capacitors, remember to help them out.

From owner-qrp-1@netcom.com Fri Apr 21 18:18:20 1995
From: Bob Levine <levine@mc.com>
Date: Fri, 21 Apr 95 14:22:46 EDT
Message-Id: <9504211822.AA01615@fugu>
Subject: OHR Explorer Kit Sale

I would like to offer the Oak Hills Research
Explorer Kits to the group for \$114 + \$5
postage with MC/VISA.

For cash/ck/MO customers, I can offer an
additional \$5 discount making the price

\$109 + \$5 (\$20.95 off the normal price of \$129.95)

COD is available for additional \$8.50.

If you need info about the Oak Hills Explorers, they are 3 Watt transceivers with superhet rx. They are reviewed by Jeff Gold in the current 73 Magazine. I have personally built the 20m kit and I found it to be a very enjoyable project requiring about 10 hours total giving me my first really operating-quality kit.

Please specify band (20/30/40/80).

Bob KD1GG
Radio Devices

Radio Devices email for complete cdrom catalog
32 Queens View Road QRZ! \$14.95, Buckmaster \$42.95
Marlboro, MA 01752 Linux, OS/2, MAC, Windows, Unix
(508)480-0502 KD1GG Ramsey Kits, Antennas West (Ham)
World Wide Web <http://www.raddev.com/biz/raddev/>

reply for Radio Devices to bob@raddev.com please. tnx

From owner-qrp-l@netcom.com Fri Apr 21 17:11:26 1995
Date: Fri, 21 Apr 1995 17:02:06 GMT
From: Goran Hosinsky <hosinsky@royac.iac.es>
Message-Id: <9504211702.AA04040@royac4.royac.iac.es>
Subject: Pigeons on beam: final solution

Some time ago I asked for help about how to handle pigeons on the antenna. A big crowd of pigeons were using my beam as place to sit down on and look at the view. I was worried that an element would break from the weight.

I got advice from several persons with ideas varying

from getting them drunk and catching them (they don't touch the stuff - I had to eat all that bread drowned in Vodka myself)

to chemicals (that one was expensive, had to order it by post from far away - and they rather seemed to like the smell)

to mechanical scarecrow (4 three meter quad spreader mounted about 1/2 meter in a rotating horizontal cross above the beam with plastic strips dangeling). Helped for about a week, then they started to use the scarecrow as a secondary perch. Now I have only three quad spreader, if because of high winds or because of pigeon weight I do not know, was not at home when that happened.

Final solution: Covering the chicken run with netting. There still are a lot of pigeons around but now when they cannot get a quick and easy meal with the chicken they don't seem to have time to waste sitting on the beam looking at the view.

I did get one advice after I covered up the chicken run which I have not tested but which sounds reasonable and so I pass it on in case anyone has the same problem:
Put monofilar fishing line a few centimeter above the elements. The pigeons get trouble putting their feet where they want to and so leave the antenna alone.

73
Goran EA8YU

From owner-qrp-1@netcom.com Fri Apr 21 11:43:12 1995
Message-Id: <9504211404.AA22008@garnet.inel.gov>
Date: Fri, 21 Apr 1995 08:05:24 -0600
From: LVE1@inel.gov (Larry East)
Subject: QRP Plus Group Purchase?

Who's handling he next group purchase from Index Labs? Please send me email with the info. Thanks.

"Any opinions expressed herein are my own and probably do not agree with those of my employer, the U.S. Government or my spouse"

--... ..--

Larry V. East (W1HUE)

Idaho Falls, ID

e-mail: LVE1@inel.gov

Packet: W1HUE@WT7B.ID.U.S.A.NOAM

work: (208) 533-4005 home: (208) 529-2162

From owner-qrp-1@netcom.com Fri Apr 21 16:03:13 1995

Date: Fri, 21 Apr 1995 12:52:57 -0400 (EDT)
From: prvalko <prvalko@Oakland.edu>
Subject: Re: QRP Plus Group Purchase?
Message-Id: <Pine.3.89.9504211250.B15632-0100000@saturn.acs.oakland.edu>

On Fri, 21 Apr 1995, Larry East wrote:

> Who's handling the next group purchase from Index Labs? Please send me email
> with the info. Thanks.
>

Gee Larry, sounds to me like you just volunteered!

73! =paul= wb8zjl

p.s. mine's on order already

From owner-qrp-1@netcom.com Fri Apr 21 16:01:58 1995
From: mpw@scintl.com
Message-Id: <9504211655.AA14705@scintl.com>
Subject: QRP Plus Group Purchase? (fwd)
Date: Fri, 21 Apr 1995 11:55:50 -0500 (CDT)

Forwarded message:

> Who's handling the next group purchase from Index Labs? Please send me email
> with the info. Thanks.

Me, Too!

--

Mike White mpw@scintl.com SuperComputers
N9UXC 715/833-7067 International

From owner-qrp-1@netcom.com Fri Apr 21 15:56:39 1995
Date: Fri, 21 Apr 95 08:53:26 PST
From: TLeonard@ccmgate.mti.com (Leonard, Tim)
Message-Id: <9503217984.AA798479606@ccmgate.mti.com>
Subject: Re[2]: Ham Stick Antennas

Cameron:

What you have seen on 40 meters is typical of mobile installations. I have used several antennas, including the Ham Stick and in all cases, a 300 to 500 pf mica capacitor, mounted at the base of the antenna, placed across the antenna terminals was required to raise the feed point impedance to 50 ohms. In the case of the ham sticks, the

"hot" side of the cap was attached with an aligator clip so that when the antenna was changed to 20 meters, the cap could be removed.

Tim AA6DQ

From owner-qrp-l@netcom.com Fri Apr 21 17:45:38 1995
Date: Fri, 21 Apr 1995 08:26:31 -0400 (EDT)
From: James Lyons <jlyons@CAM.ORG>
Subject: Roy Gregson
Message-Id: <Pine.SOL.3.91.950421082445.10810A-100000@ocean>

Roy,

Sorry about this but I don't have your email address!

I got the info and think even I may be able to make one. I'll let you know.

Please sned me your email address.

Sorry for this fellas!

Jim, VE2KN

From owner-qrp-l@netcom.com Fri Apr 21 17:57:45 1995
Date: Fri, 21 Apr 95 10:49:17 PST
From: Mark E Gustoff <Mark_E_Gustoff@ccm.ch.intel.com>
Message-Id: <950421104917_4@ccm.hf.intel.com>
Subject: Vertical Antennas: (Boom or Bust)

Text item:

QRPers:

I'm in the process of attempting to fashion a reasonable antenna system for my new home. First and foremost, a tower is out of the picture at this time.

I've been reading and investigating the various vertical antennas on the market, and would appreciate fellow QRPer's knowledge or experience with the respective verticals below.

Cushcraft R7:

I spoke with Cushcraft, and when asked why their "1/2 wave" antenna was only a 1/4 wave at best, they stated that it was an electrical 1/2 wave, and not physical.

I asked for efficiency measurements and they had none. I asked for radiation resistance figures, and they've not measured those. They did confirm for me that the antenna MUST be 8' or higher off the ground, and ground mounting with additional long radials would detune the antenna system.

They also conveyed that phasing the antennas was possible, but they had no details.

Butternut HF9-VX

Butternut publishes a brochure titled "Dirty Little Secrets" which bashes the claims made by the sellers of the new 1/2 wave antennas, or rather I should say it lays forth some technical assessment over them:

- 1) 1/4 physical length does not make a 1/2 wave antenna
- 2) 4 stick or other counterpoise system, is not large enough to increase antenna efficiency.
- 3) Traps in other antennas lose your power.
- 4) Center feed cannot lower earth losses. "Earth losses, after all, are found in the earth and NOT in the radiator".
- 5) Their antenna over radial system will have higher efficiency than "1/2 waves" (of course) Ground mounted.

GAP Titan

This antenna looks the most impressive to me, but I know nothing about it yet. I've not been able to reach the manufacturer. But it has claims of being a center fed, minimal counterpoise based system. Anyone measured or know the approximate efficiency of this antenna system? Any user accounts?

I can reasonably run 20 or so radials from a vertical if I install one at my QTH.

Any guidance towards intelligent documentation of such systems above would be greatly appreciated, as well as any personal observations and comments.

Until then, I power on with my Windom, which I suspect is more efficient than any vertical I could mount in the back yard.

73,

Mark de W07T/QRP

Text item: External Message Header

The following mail header is for administrative use
and may be ignored unless there are problems.

IF THERE ARE PROBLEMS SAVE THESE HEADERS.

Precedence: list

Sender: owner-qrp-l@netcom.com

Subject: Duvida Atroz

To: qrp-l@netcom.com

Message-Id: <9504201836.AA11337@if.ufrgs.br>

>From: elsh@if.ufrgs.br (Emerson Luis de Santa Helena)

Date: Thu, 20 Apr 95 15:36:18 EST

Received: from astro1.if.ufrgs (astro1.if.ufrgs.br) by if.ufrgs.br (4.1/IF-UFRGS-950320)

id AA11337; Thu, 20 Apr 95 15:36:18 EST

Received: from if.ufrgs.br by mail2.netcom.com (8.6.12/Netcom)

id LAA06489; Thu, 20 Apr 1995 11:36:25 -0700

Received: by mail2.netcom.com (8.6.12/Netcom)

id LAA06765; Thu, 20 Apr 1995 11:37:33 -0700

Received: from mail2.netcom.com by ormail.intel.com with smtp

(Smail3.1.28.1 #7) id m0s2FWC-000UgFC; Fri, 21 Apr 95 03:00 PDT

Received: from ormail.intel.com by relay.hf.intel.com with smtp

(Smail3.1.28.1 #2) id m0s2FWH-000qDMC; Fri, 21 Apr 95 03:01 PDT

From owner-qrp-l@netcom.com Sat Apr 22 00:17:17 1995

Date: Fri, 21 Apr 95 17:14:10 PST

From: TLeonard@ccmgate.mti.com (Leonard, Tim)

Message-Id: <9503217985.AA798509650@ccmgate.mti.com>

Subject: Re: Vertical Antennas: (Boom or Bust)

Mark,

I have used various verticals for the last 30 years. I have found through experimentation and measurement that you can get away with a few radials per band (like about 4) if you mount the vertical above ground, ie on a roof. There should be 4 per band, 1/4 wave long. For ground mounting, the more radials the better. I currently use a Butternut HF2V with a remotely controlled matching network at its base for 80 through 10 meters. This antenna started out with four radials each 22 feet long and 2 radials each 60 feet long. I used the antenna for about 6 months with mixed results. I then added more radials, bringing the total to 16. The mix is 4 radials each 22 feet, 4 radials each 33 feet, 4 radials each 66 feet, and the last 4 each 16

feet. The performance was dramatically better. My reference antenna for these tests is a Hygain 12AVQ for 20 to 10 meters and a 40 meter dipole (at 12 feet) . The HF2V with only 6 radials used to have the same S meter reading as the dipole on 40 meters. After adding the radials, the HF2V now shows 3 S units increase on DX (greater than 1500 miles distance) and 3 S units decrease on short skip stuff. Similar results have been found on transmit tests. The antenna impedance is relatively stable with regard to ground conductivity now (rain verses dry).

Several years ago, at Field Day, I had the chance to compare a ground mounted Hygain 14AVQ with 8 radials with a Cushcraft R5 mounted about 8 feet off the ground. The comparison was on 20 meters. The 14AVQ was 1 to 2 S units better on all signals on receive. Transmit tests were not conducted due to FD.

As a final observation, a ground mounted vertical tends to put more RF into the consumer junk that you and your neighbors have, due of course to the low angle of radiation. Mounting the vertical on a chimney/roof seemed to help reduce the RFI/TVI to the neighbors, while increasing my problems due to coupling into the house/tv wiring.

Tim AA6DQ

If not,

From owner-qrp-l@netcom.com Fri Apr 21 14:58:46 1995
Message-Id: <n1413662121.13823@msmailgw1.arlut.utexas.edu>
Date: 21 Apr 1995 10:31:17 -0600
From: "rohre" <rohre@arlut.utexas.edu>
Subject: Will Dayton crowd take qrp-l to suite?

I just read Dick of Kanga's message about the nice assortment of Morse keys they are bringing here to the colonies.

Makes me wish again I could take off and go to Dayton; but maybe next year.

However, a light bulb went off on how those of us on the list and left at home can share a little in the Dayton experience.

Will anyone be able to take a laptop, or portable PC with modem to Dayton and download a Dayton Dailey Bullentin to qrp-l? Might be interesting, and would be appreciated. Thanks in advance to anyone who can take up the project.

72, Stuart

K5KVH (GQRP #4943, and would surely like a spy key)